

-1/12-

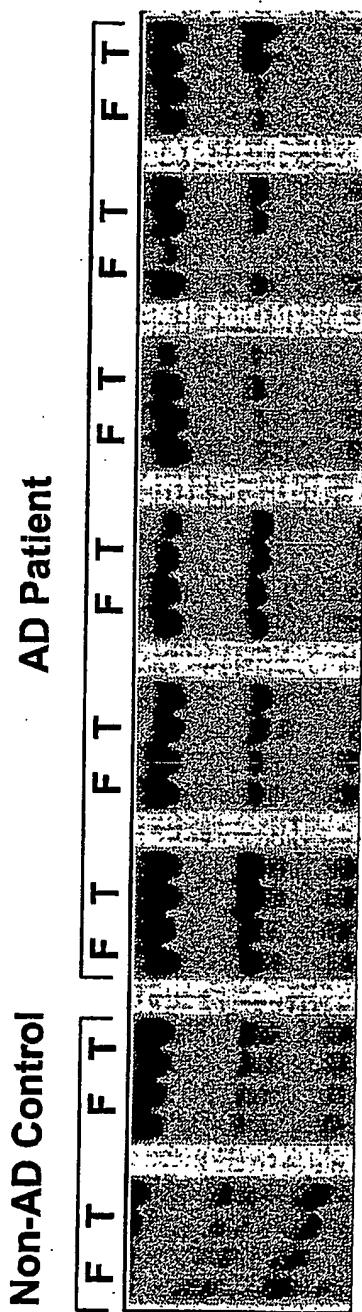
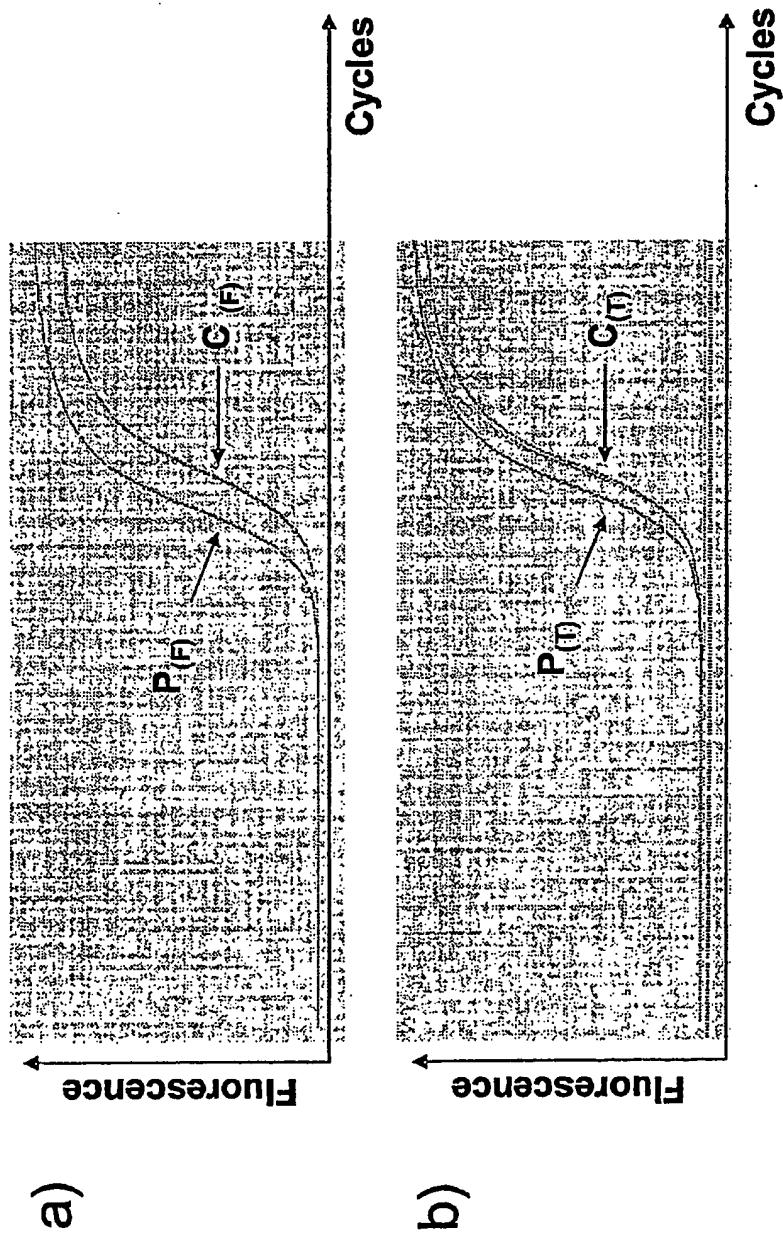


Fig. 1: Identification of differentially expressed genes in a fluorescence differential display screen

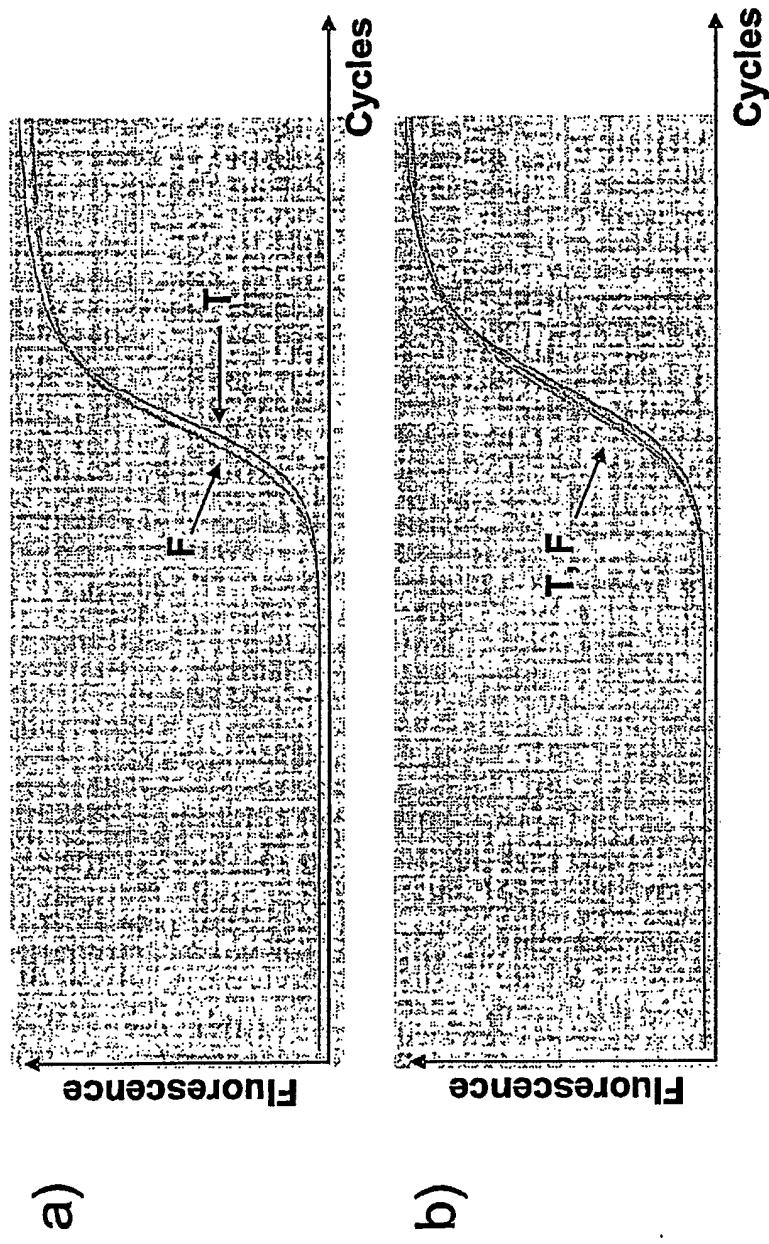
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Fig. 2: Verification of differential expression of KCNE4 by quantitative PCR



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Fig. 3: Verification of differential expression of KCNE4 by quantitative PCR



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Fig. 4 : SEQ ID NO. 1:
amino acid sequence of
human KCNE4 protein

Length: 170 aa

```
1  MLKMEPLNST HPGTAASSSP LESRAAGGGS GNGNEYFYIL VVMSFYGIFL
 51  IGIMLGYMKS KRREKKSSLL LLYKDEERLW GEAMKPLPVV SGLRSVQVPL
101  MLNMLQESVA PALSCTLCSM EGDSVSSESS SPDVHLTIQE EGADEELEET
151  SETPLNESSE GSSENIHQNS
```

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Fig. 5: SEQ ID NO. 2:
nucleotide sequence of
human KCNE4 cDNA

Length: 1204 bp

```
1  AGCAGAAGAA CCCTCTTGG  CTGGACGATT TGGGAATTCA AAAACTTGGGA
 51 CAAACTGTCA GCCCTGCC  TGCTGTGGAG GCAGCCTCAA TGCTGAAAAT
101 GGAGCCTCTG AACAGCACGC ACCCCGGCAC CGCCGCCTCC AGCAGCCCCC
151 TGGAGTCCCG TGCAGCCGGT GGCGGCAGCG GCAATGGCAA CGAGTACTTC
201 TACATTCTGG TTGTCTATGTC CTTCTACGGC ATTTTCTTGA TCGGAATCAT
251 GCTGGGCTAC ATGAAATCCA AGAGGCGGGA GAAGAAGTCC AGCCTCCTGC
301 TGCTGTACAA AGACGAGGAG CGGCTCTGGG GGGAGGCCAT GAAGCCGCTG
351 CCCGTGGTGT CGGGCCTGAG GTGGTGCAG GTGCCCTGAG TGCTGAACAT
401 GCTGCAGGAG AGCGTGGCGC CCGCGCTGTC CTGCACCCCTC TGTTCCATGG
451 AAGGGGACAG CGTGGCTCC GAGTCTCCTC CCCCCGGACGT GCACCTCACC
501 ATTCAAGGAGG AGGGGGCAGA CGAGGAGCTG GAGGAGACCT CGGAGACGCC
551 CCTCAACGAG AGCAGCGAAG GGTCTCTGGA GAACATCCAT CAGAATTCCCT
601 AGCACCCCCCG GGACCCCTGC GGGTGGCTCC ATCAGCCAGC AACCTTAGAG
651 AGAGGAAAGA CAGTTTCAA GTGTCTGGTT TCACCTTCAC AGTGCGGCTG
701 CCACTTTGAA GAGACCCCTG GTAAACCCCT GATTGGGGGT GGGGTGGGGG
751 ACTAGGCTCA GCCGGAACCA GCACCTCCAA GGAGTCCGGG AGGTGCCTGT
801 GGTTTGCACC CACCACTGAA AAAGCCGCGG AGATGCGCAG CGCGTACACT
851 GACTTTGGGG CCTGGGTGTT GGGGTTCTGA TCAGAATTG GCGGGATGAT
901 ATGCTTGCCA TTTCTCACT GGATGCCCTG GGTAGCTCCT GCAGGGTCTG
951 CCTGTTCCCA GGGCTGCCGA ATGCTTAGGA CACGCTGAGA GACTAGTTGT
1001 GATTGCTAT TTGCTTAA GCTTGTCTCCT TCTAGATCTG ATTGGCTGTA
1051 AGTATCTCA CTGTGTACCT GTGGCATTCC TTCACAGTGG GTTACAAGCT
1101 TCTTTGGAT TAGAGGGGA TTTTGATGG GAGAAAGCTG GAGATCTGAA
1151 CCCAGCCCAT TTGCACACTA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA
1201 AAAA
```

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Fig. 6: SEQ ID NO. 3

Length: 193 bp

```
1  TAGTGTGCAA ATGGGCTGGG TTCAGATCTC CAGCTTCTC CCATCAAAAA
51  TCCCCCTCTA ATCCAAAAGA AGCTTGTAAC CCACTGTGAA GGAATGCCAC
101 AGGTACACAG TAGAGATACT TACAGCCAAT CAGATCTAGA AGGACAAAGC
151 TCTAGGCAAA ATAGCAAATC ACAACTAGTC TCTCAGCGTC ACC
```

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Fig. 7: SEQ ID NO. 4:
nucleotide sequence of
human KCNE4 coding sequence

Length: 513 bp

```
1 ATGCTGAAAA TGGAGCCTCT GAACAGCACG CACCCCGGCA CCGCCGCCTC
 51 CAGCAGCCCC CTGGAGTCCC GTGCCGCCGG TGGCGGCAGC GGCAATGGCA
101 ACGAGTACTT CTACATTCTG GTTGTATGT CCTTCTACGG CATTTCCTTG
151 ATCGGAATCA TGCTGGGCTA CATGAAATCC AAGAGGCGGG AGAAGAAGTC
201 CAGCCTCCTG CTGCTGTACA AAGACGAGGA GCGGCTCTGG GGGGAGGCCA
251 TGAAGCCGCT GCCCGTGGTG TCGGGCCTGA GGTGGTGCAG GGTGCCCTG
301 ATGCTGAACA TGCTGCAGGA GAGCGTGGCG CCCGCGCTGT CCTGCACCCCT
351 CTGTTCCATG GAAGGGGACA GCGTGAGCTC CGAGTCCTCC TCCCCGGACG
401 TGCACCTCAC CATTCAAGGAG GAGGGGGCAG ACGAGGAGCT GGAGGAGACC
451 TCGGAGACGC CCCTCAACGA GAGCAGCGAA GGGTCCTCGG AGAACATCCA
501 TCAGAATTCC TAG
```

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**Fig. 8: Alignment of SEQ ID NO. 2
with SEQ ID NO. 3**

Length: 193 bp

193	GGTGACGCTGAGAGACTAGTTGTGATTGCTATTTGCCTAGAGCTTTGT	144
978	GGACACGCTGAGAGACTAGTTGTGATTGCTATTTGCCTAGAGCTTTGT	1027
143	CCTCTAGATCTGATTGGCTGTAAGTATCTCTACTGTGTACCTGTGGCAT	94
1028	CCTCTAGATCTGATTGGCTGTAAGTATCTCTACTGTGTACCTGTGGCAT	1077
93	TCCTTCACAGTGGTTACAAGCTTCTTGGATTAGAGGGGGATTTTGA	44
1078	TCCTTCACAGTGGTTACAAGCTTCTTGGATTAGAGGGGGATTTTGA	1127
43	TGGGAGAAAGCTGGAGATCTGAACCCAGCCCATTGACACTA	1
1128	TGGGAGAAAGCTGGAGATCTGAACCCAGCCCATTGACACTA	1170

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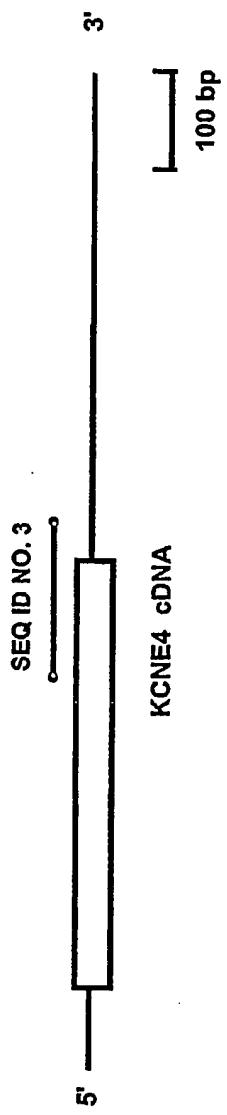
**Fig. 9 : Alignment of KCNE4 RT-PCR
primers with human KCNE4 cDNA,
SEQ ID NO. 2**

1 GGTTTGCACCCACCACTGA 19
|||||||
801 GGTTTGCACCCACCACTGA 819

19 TCAGAATTGGCGGGATGA 1
|||||||
881 TCAGAATTGGCGGGATGA 899

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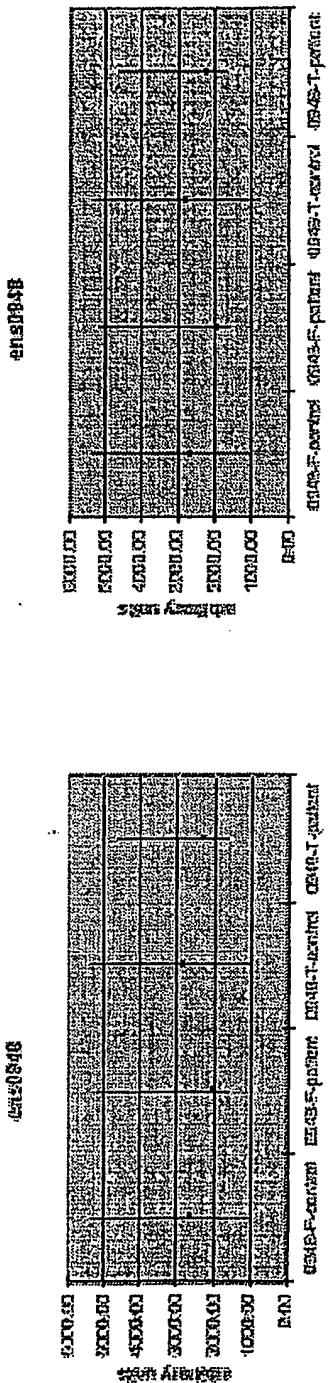
Fig. 10 : Schematic alignment of SEQ ID NO. 3 with human KCNE4 cDNA, SEQ ID NO. 2



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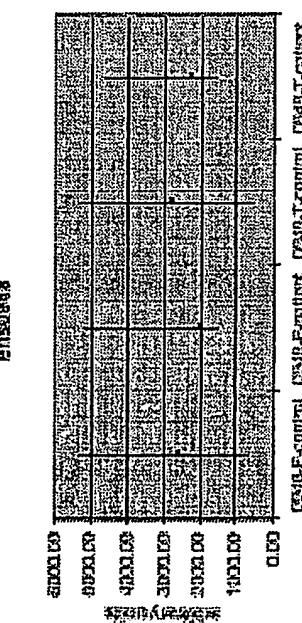
Fig. 11 : Analysis of absolute mRNA expression of KCNE4

Comparison of Break D-S Waves 4-8



Competencies of English Q2 with Grade 3-6

Completion of Break 0-1 Well 2-8



Complaints of Electrical Outages

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-12/12-

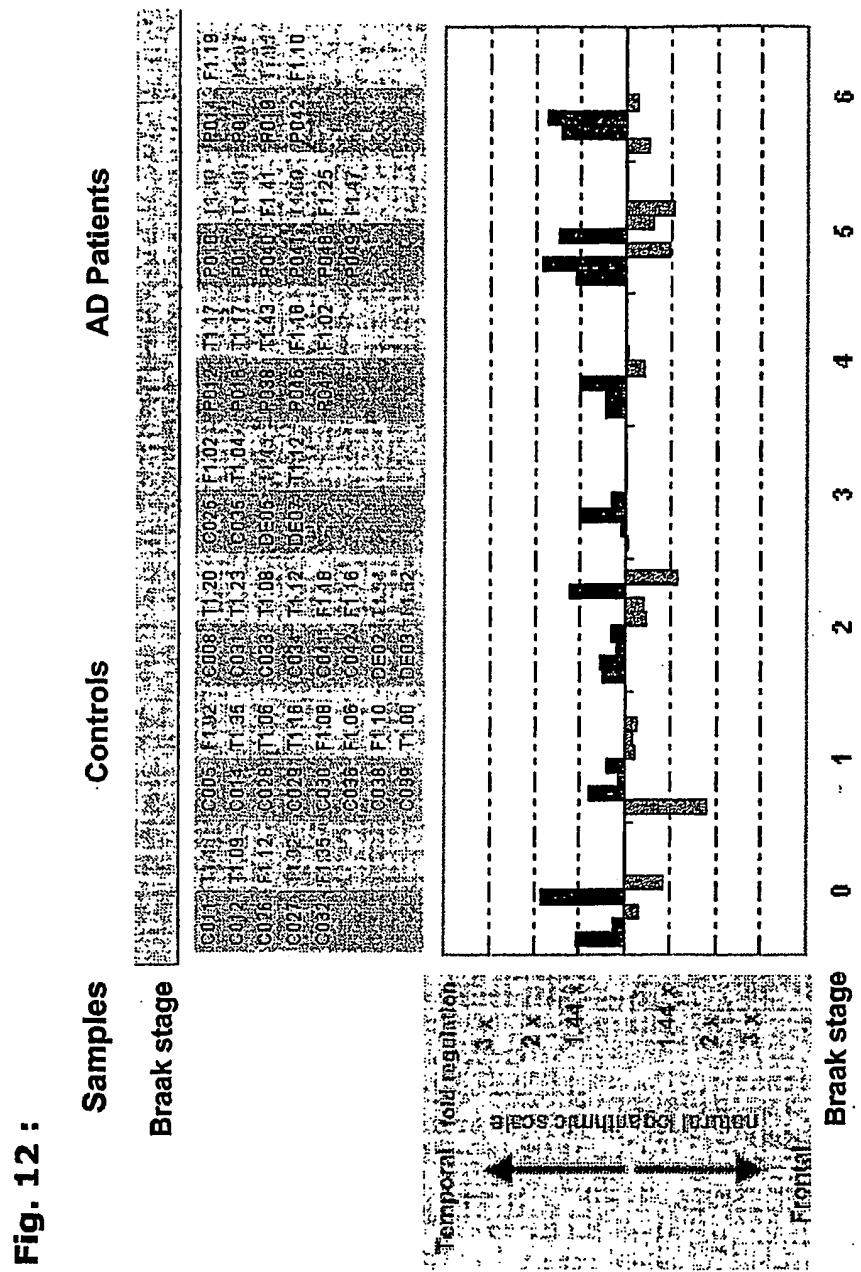


Fig. 12:

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